

J.K. Cement WORKS, MANGROL (RAJ) (Unit-1)
DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE
April' 2017 - September' 2017

DATE	NAME OF THE STACK / DUCT ATTACHED WITH UNIT AND MONTH	CROSS SECTI ONAL AREA OF DUCT (M2)	STAC K GASE S TEMP . (⁰ K)	STACK GASES VELOC ITY (M / Sec.)	FLOW OF GASES IN STACK (NM ³ /Sec .)	DUST CONC. (Mg/N M ³)	MEAN DUST CONC. (Mg/NM ³)	EMISSIO N RATE (Ts/DAY)	REMARK
	April' 2017								
04.04.2017	KILN + RAW MILL -1 (B.H.)	Under Maintenance							
11.04.2017	KILN + RAW MILL -1 (B.H.)								
18.04.2017	KILN + RAW MILL -1 (B.H.)								
30.04.2017	KILN + RAW MILL -1 (B.H.)								
	May' 2017								
05.05.2017	KILN + RAW MILL -1 (B.H.)	Under Maintenance					14.2		
12.05.2017	KILN + RAW MILL -1 (B.H.)								
19.05.2017	KILN + RAW MILL -1 (B.H.)	5.23	406	15.86	60.88	15.6		0.082	
26.05.2017	KILN + RAW MILL -1 (B.H.)	5.23	405	15.30	58.88	12.7		0.065	
	June' 2017								

01.06.2017	KILN + RAW MILL -1 (B.H.)	5.23	404	15.58	60.10	13.40	12.6	0.018	
08.06.2017	KILN + RAW MILL -1 (B.H.)	5.23	407	15.23	58.32	17.60		0.023	
15.06.2017	KILN + RAW MILL -1 (B.H.)	5.23	402	14.62	56.68	11.10		0.054	
22.06.2017	KILN + RAW MILL -1 (B.H.)	5.23	399	15.77	61.60	8.10		0.043	
	July' 2017								
04.07.2017	KILN + RAW MILL -1 (B.H.)	5.23	402	14.85	57.57	14.70	13.6	0.019	
11.07.2017	KILN + RAW MILL -1 (B.H.)	5.23	405	14.37	55.30	11.00		0.014	
18.07.2017	KILN + RAW MILL -1 (B.H.)	5.23	406	14.05	53.93	16.10		0.020	
25.07.2017	KILN + RAW MILL -1 (B.H.)	5.23	403	15.43	59.67	12.70		0.017	
	August' 2017								
01.08.2017	KILN + RAW MILL -1 (B.H.)	5.23	407	14.73	56.41	12.60	15.4	0.061	
08.08.2017	KILN + RAW MILL -1 (B.H.)	5.23	403	15.28	59.09	16.10		0.082	
16.08.2017	KILN + RAW MILL -1 (B.H.)	5.23	402	14.85	57.57	18.30		0.091	
23.08.2017	KILN + RAW MILL -1 (B.H.)	5.23	405	14.20	54.65	14.70		0.069	
	September' 2017								
01.09.2017	KILN + RAW MILL -1 (B.H.)	5.23	415	13.57	50.96	14.10	17.2	0.017	
08.09.2017	KILN + RAW MILL -1 (B.H.)	5.23	410	14.12	53.67	20.90		0.025	
15.09.2017	KILN + RAW MILL -1 (B.H.)	5.23	409	14.82	56.47	18.30		0.054	
22.09.2017	KILN + RAW MILL -1 (B.H.)	5.23	412.0	13.35	50.50	15.40		0.043	

	April' 2017								
04.04.2017	FOLAX COOLER (E.S.P)	Kiln Under Maintenance							
11.04.2017	FOLAX COOLER (E.S.P)								
18.04.2017	FOLAX COOLER (E.S.P)								
30.04.2017	FOLAX COOLER (E.S.P)								
	May' 2017								
05.05.2017	FOLAX COOLER (E.S.P)	Under Maintenance					44.25		
12.05.2017	FOLAX COOLER (E.S.P)								
19.05.2017	FOLAX COOLER (E.S.P)	7.07	425.0	7.09	35.15	46.60		0.142	
26.05.2017	FOLAX COOLER (E.S.P)	7.07	427.0	7.90	38.98	41.90		0.141	
	June' 2017								
01.06.2017	FOLAX COOLER (E.S.P)	7.1	432.0	6.9	33.5	19.5	24.3	0.056	
08.06.2017	FOLAX COOLER (E.S.P)	7.1	428.0	7.3	35.7	25.8		0.080	
15.06.2017	FOLAX COOLER (E.S.P)	7.1	425.0	8.3	40.9	28.8		0.102	
22.06.2017	FOLAX COOLER (E.S.P)	7.1	430.0	8.1	39.7	23.2		0.080	
	July' 2017								
04.07.2017	FOLAX COOLER (E.S.P)	7.07	428	6.64	32.69	22.60	22.1	0.013	
11.07.2017	FOLAX COOLER (E.S.P)	7.07	425	7.52	37.28	18.30		0.012	
18.07.2017	FOLAX COOLER (E.S.P)	7.07	420	8.26	41.43	25.90		0.018	

19.05.2017	COAL MILL (B.F.)	0.45	340.0	26.38	10.40	15.70		0.014	
26.05.2017	COAL MILL (B.F.)	0.45	338.0	26.74	10.61	11.70		0.011	
	June' 2017								
01.06.2017	COAL MILL (B.F.)	0.45	337	27.09	10.78	17.50	15.4	0.041	
08.06.2017	COAL MILL (B.F.)	0.45	342	26.63	10.44	22.50		0.052	
15.06.2017	COAL MILL (B.F.)	0.45	343	26.94	10.53	10.00		0.009	
22.06.2017	COAL MILL (B.F.)	0.45	335	26.01	10.41	11.40		0.010	
	July' 2017			-					
04.07.2017	COAL MILL (B.F.)	0.45	338	26.02	10.32	15.20	18.5	0.034	
11.07.2017	COAL MILL (B.F.)	0.45	337	25.25	10.05	21.50		0.047	
18.07.2017	COAL MILL (B.F.)	0.45	341	26.44	10.40	12.40		0.028	
25.07.2017	COAL MILL (B.F.)	0.45	336	25.45	10.16	24.80		0.055	
	August' 2017								
01.08.2017	COAL MILL (B.F.)	0.45	335	25.58	10.24	10.90	14.4	0.010	
08.08.2017	COAL MILL (B.F.)	0.45	338	24.97	9.91	15.40		0.013	
16.08.2017	COAL MILL (B.F.)	0.45	342	25.70	10.08	18.80		0.016	
23.08.2017	COAL MILL (B.F.)	0.45	340	26.00	10.25	12.40		0.011	
	September' 2017								
01.09.2017	COAL MILL (B.F.)	0.45	332	25.06	10.12	9.40	12.7	0.020	

08.09.2017	COAL MILL (B.F.)	0.45	339	25.75	10.19	13.80		0.031	
15.09.2017	COAL MILL (B.F.)	0.45	343	25.15	9.83	16.20		0.035	
22.09.2017	COAL MILL (B.F.)	0.45	335.0	26.07	10.44	11.30		0.025	
	April' 2017								
04.04.2017	CEMENT MILL No.-1 (B.F.)	Mill Under Maintenance							
11.04.2017	CEMENT MILL No.-1 (B.F.)								
18.04.2017	CEMENT MILL No.-1 (B.F.)								
30.04.2017	CEMENT MILL No.-1 (B.F.)								
	May' 2017								
04.05.2017	CEMENT MILL - 1 (B.F.)	Mill Under Maintenance							
11.05.2017	CEMENT MILL - 1 (B.F.)								
18.05.2017	CEMENT MILL - 1 (B.F.)								
31.05.2017	CEMENT MILL - 1 (B.F.)								
	June' 2017								
05.06.2017	CEMENT MILL No.-1 (B.F.)	Mill Under Maintenance							
12.06.2017	CEMENT MILL No.-1 (B.F.)								
19.06.2017	CEMENT MILL No.-1 (B.F.)								
30.06.2017	CEMENT MILL No.-1 (B.F.)								
	July' 2017			-					

04.07.2017	CEMENT MILL - 1 (B.F.)	Under Major Shutdown							
11.07.2017	CEMENT MILL - 1 (B.F.)								
18.07.2017	CEMENT MILL - 1 (B.F.)								
31.07.2017	CEMENT MILL - 1 (B.F.)								
	August' 2017			-					
01.08.2017	CEMENT MILL No.-1 (B.F.)	Under Major Shutdown							
08.08.2017	CEMENT MILL No.-1 (B.F.)								
16.08.2017	CEMENT MILL No.-1 (B.F.)								
31.08.2017	CEMENT MILL No.-1 (B.F.)								
	September' 2017								
01.09.2017	CEMENT MILL - 1 (B.F.)	Under Major Shutdown							
08.09.2017	CEMENT MILL - 1 (B.F.)								
15.09.2017	CEMENT MILL - 1 (B.F.)								
30.09.2017	CEMENT MILL - 1 (B.F.)								
	April' 2017								
05.04.2017	CEMENT MILL - 2 (E.S.P)	0.50	373	10.14	4.05	40.90	42.3	0.014	
12.04.2017	CEMENT MILL - 2 (E.S.P)	Under Maintenance							
20.04.2017	CEMENT MILL - 2 (E.S.P)	0.50	369	9.68	3.91	49.10		0.017	
27.04.2017	CEMENT MILL - 2 (E.S.P)	0.50	375	9.51	3.78	36.90		0.012	

	May' 2017								
04.05.2017	CEMENT MILL - 2 (E.S.P)	0.50	376	10.35	4.10	45.00	40.2	0.016	
18.05.2017	CEMENT MILL - 2 (E.S.P)	0.50	372	10.51	4.21	41.20		0.015	
27.05.2017	CEMENT MILL - 2 (E.S.P)	0.50	374	9.74	3.88	39.00		0.013	
30.05.2017	CEMENT MILL - 2 (E.S.P)	0.50	373	10.19	4.07	35.70		0.013	
	June' 2017								
05.06.2017	CEMENT MILL - 2 (E.S.P)	0.50	381	10.42	4.08	28.40	26.3	0.010	
12.06.2017	CEMENT MILL - 2 (E.S.P)	Under Maintenance							
19.06.2017	CEMENT MILL - 2 (E.S.P)	0.50	378	10.20	4.02	27.50		0.010	
26.06.2017	CEMENT MILL - 2 (E.S.P)	0.50	374	9.80	3.90	23.10		0.008	
	July' 2017			-					
05.07.2017	CEMENT MILL - 2 (E.S.P)	0.50	379	9.69	3.81	21.90	25.3	0.007	
11.07.2017	CEMENT MILL - 2 (E.S.P)	0.50	375	10.13	4.02	28.50		0.010	
18.07.2017	CEMENT MILL - 2 (E.S.P)	0.50	381	9.49	3.71	23.80		0.008	
26.07.2017	CEMENT MILL - 2 (E.S.P)	0.50	376	9.25	3.67	27.10		0.009	
	August' 2017			-					
01.08.2017	CEMENT MILL - 2 (E.S.P)	0.50	374	9.68	3.86	19.40	23.7	0.006	
14.08.2017	CEMENT MILL - 2 (E.S.P)	0.50	371	10.13	4.07	28.10		0.010	
21.08.2017	CEMENT MILL - 2 (E.S.P)	0.50	368	9.88	4.00	24.60		0.009	

28.08.2017	CEMENT MILL - 2 (E.S.P)	0.50	377	9.61	3.80	22.80		0.007	
	September' 2017			-					
06.09.2017	CEMENT MILL - 2 (E.S.P)	0.50	372	8.91	3.57	23.80	21.6	0.007	
13.09.2017	CEMENT MILL - 2 (E.S.P)	0.50	375	9.81	3.90	19.50		0.007	
21.09.2017	CEMENT MILL - 2 (E.S.P)	0.50	370	10.06	4.05	26.10		0.009	
30.09.2017	CEMENT MILL - 2 (E.S.P)	0.50	378	9.28	3.66	17.00		0.005	
	April' 2017								
04.04.2017	CRUSHER-1 (B.F.)	Mill Under Maintenance					21.30		
11.04.2017	CRUSHER-1 (B.F.)								
24.04.2017	CRUSHER-1 (B.F.)	0.38	315.0 0	12.61	4.53	21.30		0.01	
30.04.2017	CRUSHER-1 (B.F.)	Mill Under Maintenance							
	May' 2017								
04.05.2017	CRUSHER-1 (B.F.)	Under Maintenance					21.3		
11.05.2017	CRUSHER-1 (B.F.)								
18.05.2017	CRUSHER-1 (B.F.)	0.38	321.0	13.39	4.72	19.50		0.008	
25.05.2017	CRUSHER-1 (B.F.)	0.38	325.0	13.93	4.85	23.10		0.010	
	June' 2017								
05.06.2017	CRUSHER-1 (B.F.)	0.38	323	14.15	4.96	18.90	19.6	0.008	
12.06.2017	CRUSHER-1 (B.F.)	0.38	320	13.42	4.75	24.70		0.010	

19.06.2017	CRUSHER-1 (B.F.)	0.38	317	12.36	4.42	19.60		0.007	
26.06.2017	CRUSHER-1 (B.F.)	0.38	315	13.53	4.86	15.10		0.006	
	July' 2017								
04.07.2017	CRUSHER-1 (B.F.)	0.38	317	14.18	5.07	17.40	20.9	0.008	
11.07.2017	CRUSHER-1 (B.F.)	0.38	312	17.09	6.20	19.60		0.011	
20.07.2017	CRUSHER-1 (B.F.)	0.38	315	13.41	4.82	21.70		0.009	
27.07.2017	CRUSHER-1 (B.F.)	0.38	314	15.92	5.74	24.90		0.012	
	August' 2017								
03.08.2017	CRUSHER-1 (B.F.)	0.38	318	17.39	6.19	23.50	24.8	0.013	
10.08.2017	CRUSHER-1 (B.F.)	0.38	315	16.22	5.83	28.70		0.014	
17.08.2017	CRUSHER-1 (B.F.)	0.38	317	13.52	4.83	25.10		0.010	
25.08.2017	CRUSHER-1 (B.F.)	0.38	314	16.75	6.04	21.90		0.011	
	September' 2017								
01.09.2017	CRUSHER-1 (B.F.)	0.38	321	17.47	6.16	27.40	28.1	0.015	
08.09.2017	CRUSHER-1 (B.F.)	0.38	318	15.73	5.60	28.80		0.014	
15.09.2017	CRUSHER-1 (B.F.)	0.38	323	14.95	5.24	26.80		0.012	
23.09.2017	CRUSHER-1 (B.F.)	0.38	315	17.82	6.41	29.40		0.016	

J.K. Cement WORKS, MANGROL (RAJ) (Unit-2)
DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE
April' 2017 - September' 2017

DATE	NAME OF THE STACK / DUCT ATTECHED WITH UNIT AND MONTH	CROSS SECTIO NAL AREA OF DUCT (M2)	STACK GASES TEMP. (⁰ K)	STACK GASES VELOCIT Y (M / Sec.)	FLOW OF GASES IN STACK (NM ³ /Sec .)	DUST CONC. (Mg/NM ³)	MEAN DUST CONC. (Mg/NM ³)	EMISSIO N RATE (Ts/DAY)	REMARK
	April' 2017			-					
03.04.2017	KILN + RAW MILL (Bag House)	14.18	422	14.21	142.29	19.80	17.4	0.243	
10.04.2017	KILN + RAW MILL (Bag House)	14.18	420	15.11	152.02	18.30		0.240	
17.04.2017	KILN + RAW MILL (Bag House)	14.18	419	14.71	148.35	14.20		0.182	
24.04.2017	KILN + RAW MILL (Bag House)	14.18	421	13.90	139.52	17.30		0.209	
	May' 2017								
03.05.2017	KILN + RAW MILL (Bag House)	14.18	425	14.87	147.85	12.40	15.7	0.158	
15.05.2017	KILN + RAW MILL (Bag House)	14.18	423.0	14.39	143.75	20.20		0.25	

22.05.2017	KILN + RAW MILL (Bag House)	14.18	420	15.11	152.02	16.00		0.210	
29.05.2017	KILN + RAW MILL (Bag House)	14.18	422	14.98	150.00	14.10		0.183	
	June' 2017								
02.06.2017	KILN + RAW MILL (Bag House)	14.18	421	14.02	140.72	16.80	17.6	0.204	
09.06.2017	KILN + RAW MILL (Bag House)	14.18	424	15.39	153.38	24.30		0.322	
17.06.2017	KILN + RAW MILL (Bag House)	14.18	427	14.85	146.96	14.00		0.178	
24.06.2017	KILN + RAW MILL (Bag House)	14.18	422	14.32	143.39	15.40		0.191	
	July' 2017								
05.07.2017	KILN + RAW MILL (Bag House)	14.18	418	14.60	147.59	18.40	19.4	0.235	
12.07.2017	KILN + RAW MILL (Bag House)	14.18	415	14.87	151.41	22.10		0.289	
19.07.2017	KILN + RAW MILL (Bag House)	14.18	417	15.12	153.22	19.40		0.257	
26.07.2017	KILN + RAW MILL (Bag House)	14.18	413	14.23	145.60	17.70		0.223	
	August' 2017								
03.08.2017	KILN + RAW MILL (Bag House)	14.18	412	15.03	154.15	11.30	14.2	0.150	
10.08.2017	KILN + RAW MILL (Bag House)	14.18	418	14.76	149.21	14.00		0.180	
17.08.2017	KILN + RAW MILL (Bag House)	14.18	415	14.32	145.81	17.40		0.219	

31.08.2017	KILN + RAW MILL (Bag House)	Kiln Under Maintenance							
	September' 2017								
04.09.2017	KILN + RAW MILL (Bag House)	Kiln Under Maintenance					12.3		
12.09.2017	KILN + RAW MILL (Bag House)	14.18	416	14.78	150.13	15.00		0.195	
19.09.2017	KILN + RAW MILL (Bag House)	14.18	413	15.36	157.16	12.70		0.172	
26.09.2017	KILN + RAW MILL (Bag House)	14.18	417	14.41	146.02	9.30		0.117	
	April' 2017								
03.04.2017	FOLAX COOLER (E.S.P)	8.8	407	7.5	48.3	24.2	25.3	0.101	
10.04.2017	FOLAX COOLER (E.S.P)	8.8	409	9.1	58.0	28.0		0.140	
17.04.2017	FOLAX COOLER (E.S.P)	8.8	405	8.5	55.3	26.0		0.124	
24.04.2017	FOLAX COOLER (E.S.P)	8.8	403	9.3	60.2	22.9		0.119	
	May' 2017								
03.05.2017	FOLAX COOLER (E.S.P)	8.80	409	6.62	42.45	25.60	27.3	0.094	
15.05.2017	FOLAX COOLER (E.S.P)	8.80	405.0	5.08	32.89	27.20		0.077	
22.05.2017	FOLAX COOLER (E.S.P)	8.80	407	7.22	46.52	26.50		0.107	
29.05.2017	FOLAX COOLER (E.S.P)	8.80	404	5.97	38.75	29.70		0.099	
	June' 2017								
02.06.2017	FOLAX COOLER (E.S.P)	8.80	412	5.89	37.49	20.20	22.9	0.065	

09.06.2017	FOLAX COOLER (E.S.P)	8.80	409	5.56	35.65	27.00		0.083	
17.06.2017	FOLAX COOLER (E.S.P)	8.80	413	8.33	52.89	18.90		0.086	
24.06.2017	FOLAX COOLER (E.S.P)	8.80	410	7.36	47.08	25.40		0.103	
	July' 2017								
05.07.2017	FOLAX COOLER (E.S.P)	8.80	405	7.07	45.78	24.50	24.6	0.097	
12.07.2017	FOLAX COOLER (E.S.P)	8.80	407	8.22	52.96	28.30		0.129	
19.07.2017	FOLAX COOLER (E.S.P)	8.80	403	7.69	50.04	22.20		0.096	
26.07.2017	FOLAX COOLER (E.S.P)	8.80	406	8.85	57.16	23.50		0.116	
	August' 2017								
03.08.2017	FOLAX COOLER (E.S.P)	8.80	401	8.06	52.71	18.40	21.0	0.084	
10.08.2017	FOLAX COOLER (E.S.P)	8.80	405	7.07	45.78	23.50		0.093	
17.08.2017	FOLAX COOLER (E.S.P)	8.80	402	7.68	50.10	21.10		0.091	
31.08.2017	FOLAX COOLER (E.S.P)	Under Maintenance							
	September' 2017								
04.09.2017	FOLAX COOLER (E.S.P)	Under Maintenance					19.7		
12.09.2017	FOLAX COOLER (E.S.P)	8.80	415	6.82	43.10	22.60		0.084	
19.09.2017	FOLAX COOLER (E.S.P)	8.80	410	7.12	45.54	16.6		0.065	
26.09.2017	FOLAX COOLER (E.S.P)	8.80	408	8.23	47.08	19.9		0.091	
	April' 2017								

03.04.2017	COAL MILL (B.F.)	2.00	340	14.56	25.52	12.60	15.3	0.028	
10.04.2017	COAL MILL (B.F.)	2.00	338	12.61	22.24	16.10		0.031	
17.04.2017	COAL MILL (B.F.)	2.00	336	13.65	24.21	18.40		0.038	
24.04.2017	COAL MILL (B.F.)	2.00	343	14.31	24.87	14.00		0.030	
	May' 2017								
03.05.2017	COAL MILL (B.F.)	2.00	342	13.14	22.90	17.80	17.1	0.035	
15.05.2017	COAL MILL (B.F.)	2.00	339.0	14.22	25.00	12.40		0.027	
22.05.2017	COAL MILL (B.F.)	2.00	340	12.65	22.17	21.40		0.041	
29.05.2017	COAL MILL (B.F.)	2.00	341	13.90	24.29	16.70		0.035	
	June' 2017								
02.06.2017	COAL MILL (B.F.)	2.00	343	13.65	23.72	20.00	14.6	0.041	
09.06.2017	COAL MILL (B.F.)	2.00	341	12.97	22.67	15.90		0.031	
17.06.2017	COAL MILL (B.F.)	2.00	339	12.21	21.47	10.50		0.019	
24.06.2017	COAL MILL (B.F.)	2.00	342	13.34	23.25	12.10		0.024	
	July' 2017								
05.07.2017	COAL MILL (B.F.)	2.00	337	13.29	23.50	15.20	16.5	0.031	
12.07.2017	COAL MILL (B.F.)	2.00	335	15.09	26.85	18.70		0.043	
19.07.2017	COAL MILL (B.F.)	2.00	340	14.03	24.59	17.60		0.037	
26.07.2017	COAL MILL (B.F.)	2.00	338	12.68	22.36	14.30		0.028	

	August' 2017								
03.08.2017	COAL MILL (B.F.)	2.00	341	14.80	25.87	11.80	13.6	0.026	
10.08.2017	COAL MILL (B.F.)	2.00	338	15.79	27.84	15.80		0.038	
17.08.2017	COAL MILL (B.F.)	2.00	335	17.02	30.28	13.20		0.035	
31.08.2017	COAL MILL (B.F.)	Under Maintenance							
	September' 2017								
04.09.2017	COAL MILL (B.F.)	Under Maintenance					14.8		
12.09.2017	COAL MILL (B.F.)	2.00	338	15.06	26.56	14.30		0.033	
19.09.2017	COAL MILL (B.F.)	2.00	336	17.10	30.33	11.90		0.031	
26.09.2017	COAL MILL (B.F.)	2.00	332	16.51	29.64	18.10		0.046	
	April' 2017								
04.04.2017	CEMENT MILL - 3 (Bag filter)	6.60	370	13.20	70.17	28.60	26.6	0.173	
11.04.2017	CEMENT MILL - 3 (Bag filter)	6.60	376	12.46	65.18	23.90		0.135	
18.04.2017	CEMENT MILL - 3 (Bag filter)	6.60	373	12.64	66.65	26.00		0.150	
26.04.2017	CEMENT MILL - 3 (Bag filter)	6.60	371	13.84	73.37	27.70		0.176	
	May' 2017								
04.05.2017	CEMENT MILL - 3 (Bag filter)	6.60	373	12.87	67.86	20.20	24.8	0.118	
11.05.2017	CEMENT MILL - 3 (Bag filter)	6.60	380	13.85	71.68	23.90		0.148	

20.05.2017	CEMENT MILL - 3 (Bag filter)	6.60	378	13.50	70.24	26.20		0.159	
27.05.2017	CEMENT MILL - 3 (Bag filter)	6.60	372	13.01	68.79	28.80		0.171	
	June' 2017								
02.06.2017	CEMENT MILL - 3 (Bag filter)	6.60	373	13.36	70.45	23.20	23.4	0.141	
09.06.2017	CEMENT MILL - 3 (Bag filter)	6.60	378	13.06	67.95	19.40		0.114	
16.06.2017	CEMENT MILL - 3 (Bag filter)	6.60	376	12.52	65.49	26.60		0.151	
23.06.2017	CEMENT MILL - 3 (Bag filter)	6.60	374	13.74	72.26	24.20		0.151	
	July' 2017								
05.07.2017	CEMENT MILL - 3 (Bag filter)	6.60	378	13.12	68.27	23.00	21.4	0.136	
12.07.2017	CEMENT MILL - 3 (Bag filter)	6.60	380	11.99	62.06	17.40		0.093	
19.07.2017	CEMENT MILL - 3 (Bag filter)	6.60	375	12.45	65.30	24.70		0.139	
26.07.2017	CEMENT MILL - 3 (Bag filter)	6.60	392	13.81	69.29	20.60		0.123	
	August' 2017								
01.08.2017	CEMENT MILL - 3 (Bag filter)	6.6	374	12.31	64.74	23.1	22.8	0.129	
09.08.2017	CEMENT MILL - 3 (Bag filter)	6.6	377	13.4	69.8	21.3		0.128	
24.08.2017	CEMENT MILL - 3 (Bag filter)	6.6	373	12.98	68.44	27.1		0.160	

31.08.2017	CEMENT MILL - 3 (Bag filter)	6.6	371	12.44	65.95	19.6		0.112	
	September' 2017								
04.09.2017	CEMENT MILL - 3 (Bag filter)	6.60	371	12.89	68.33	24.90	20.6	0.147	
11.09.2017	CEMENT MILL - 3 (Bag filter)	6.60	376	13.63	71.30	17.20		0.106	
18.09.2017	CEMENT MILL - 3 (Bag filter)	6.60	374	13.91	73.15	21.20		0.134	
26.09.2017	CEMENT MILL - 3 (Bag filter)	6.60	370	12.59	66.92	18.90		0.109	
	April' 2017								
06.04.2017	CRUSHER (B.F.)	1.23	315.0	10.87	12.61	25.80	24.2	0.028	
13.04.2017	CRUSHER (B.F.)	1.23	318.0	11.46	13.17	19.10		0.022	
20.04.2017	CRUSHER (B.F.)	1.23	320.0	10.50	11.99	23.40		0.024	
27.04.2017	CRUSHER (B.F.)	1.23	317.0	11.12	12.82	28.30		0.031	
	May' 2017								
02.05.2017	CRUSHER (B.F.)	1.23	321	11.73	13.35	14.30	19.7	0.016	
12.05.2017	CRUSHER (B.F.)	1.23	319.0	11.32	12.96	21.70		0.024	
19.05.2017	CRUSHER (B.F.)	1.23	322.0	10.65	12.08	18.90		0.020	
26.05.2017	CRUSHER (B.F.)	1.23	320	11.45	13.07	24.00		0.027	
	June' 2017								
03.06.2017	CRUSHER (B.F.)	1.23	325	12.32	13.85	26.2	21.6	0.031	

10.06.2017	CRUSHER (B.F.)	1.23	322	11.53	13.08	20.8		0.024	
17.06.2017	CRUSHER (B.F.)	1.23	325	12.01	13.50	16.1		0.019	
24.06.2017	CRUSHER (B.F.)	1.23	320	11.01	12.57	23.1		0.025	
	July' 2017								
04.07.2017	CRUSHER (B.F.)	1.23	317	10.08	11.62	20.70	17.4	0.021	
11.07.2017	CRUSHER (B.F.)	1.23	315	10.44	12.11	16		0.017	
18.07.2017	CRUSHER (B.F.)	1.23	312	10.71	12.54	19.3		0.021	
28.07.2017	CRUSHER (B.F.)	1.23	313	10.07	11.75	13.6		0.014	
	August' 2017								
01.08.2017	CRUSHER (B.F.)	1.23	312	10.50	12.30	23.40	20.4	0.025	
10.08.2017	CRUSHER (B.F.)	1.23	314	10.9	12.68	17.7		0.019	
17.08.2017	CRUSHER (B.F.)	1.23	317	9.97	11.49	20.1		0.020	
31.08.2017	CRUSHER (B.F.)	Under Maintenance							
	September' 2017								
04.09.2017	CRUSHER (B.F.)	Under Maintenance					18.5		
11.09.2017	CRUSHER (B.F.)	1.23	318	10.27	11.8	19.0		0.019	
18.09.2017	CRUSHER (B.F.)	1.23	312	10.92	12.79	22.5		0.025	
25.09.2017	CRUSHER (B.F.)	1.23	317	10.08	11.62	14		0.014	
	April' 2017								

05.04.2017	PACKER-1 (B.F.)	0.785	318	12.23	9.00	12.1	14.7	0.009	
12.04.2017	PACKER-1 (B.F.)	0.785	320	11.55	8.44	17.8		0.013	
19.04.2017	PACKER-1 (B.F.)	0.785	317	12.8	9.45	15.5		0.013	
26.04.2017	PACKER-1 (B.F.)	0.785	322	11.95	8.68	13.4		0.010	
	May' 2017								
05.05.2017	PACKER-1 (B.F.)	0.785	323	12.77	9.25	23.7	18.2	0.019	
12.05.2017	PACKER-1 (B.F.)	0.785	321	12.04	8.77	12.7		0.010	
20.05.2017	PACKER-1 (B.F.)	0.785	319	12.4	9.09	18.6		0.015	
27.05.2017	PACKER-1 (B.F.)	0.785	320	11.01	8.05	17.6		0.012	
	June' 2017								
02.06.2017	PACKER-1 (B.F.)	0.785	312	12.07	9.05	16.3	17.4	0.013	
09.06.2017	PACKER-1 (B.F.)	0.785	317	11.5	8.49	23.5		0.017	
16.06.2017	PACKER-1 (B.F.)	0.785	313	11.79	8.81	17.2		0.013	
23.06.2017	PACKER-1 (B.F.)	0.785	314	11.07	8.25	12.4		0.009	
	July' 2017								
06.07.2017	PACKER-1 (B.F.)	0.785	320	11.61	8.49	21.7	26.3	0.016	
13.07.2017	PACKER-1 (B.F.)	0.785	317	12.3	9.08	25.5		0.020	
20.07.2017	PACKER-1 (B.F.)	0.785	315	11.98	8.9	28.3		0.022	
27.07.2017	PACKER-1 (B.F.)	0.785	318	11.22	8.25	29.6		0.021	

	August' 2017								
02.08.2017	PACKER-1 (B.F.)	0.785	318	11.98	8.81	20.5	19.6	0.016	
09.08.2017	PACKER-1 (B.F.)	0.785	315	12.58	9.34	23.1		0.019	
23.08.2017	PACKER-1 (B.F.)	0.785	317	11.33	8.36	18.2		0.013	
30.08.2017	PACKER-1 (B.F.)	0.785	320	12.25	8.96	16.6		0.013	
	September' 2017								
05.09.2017	PACKER-1 (B.F.)	0.785	320	11.36	8.3	23.3	22.2	0.017	
12.09.2017	PACKER-1 (B.F.)	0.785	322	12.09	8.78	25.2		0.019	
19.09.2017	PACKER-1 (B.F.)	0.785	317	12.55	9.26	18.8		0.015	
26.09.2017	PACKER-1 (B.F.)	0.785	319	11.79	8.65	21.4		0.016	
	April' 2017								
05.04.2017	PACKER-2 (B.F.)	0.785	320	12.71	9.29	14.1	19.2	0.011	
12.04.2017	PACKER-2 (B.F.)	0.785	319	11.69	8.57	21.4		0.016	
19.04.2017	PACKER-2 (B.F.)	0.785	322	11.43	8.3	17.7		0.013	
26.04.2017	PACKER-2 (B.F.)	0.785	318	12.43	9.14	23.4		0.018	
	May' 2017								
05.05.2017	PACKER-2 (B.F.)	0.785	325	11.21	8.07	25.3	21.5	0.018	
12.05.2017	PACKER-2 (B.F.)	0.785	324	12.5	9.03	19.9		0.016	
20.05.2017	PACKER-2 (B.F.)	0.785	323	12.92	9.36	17.5		0.014	

27.05.2017	PACKER-2 (B.F.)	0.785	320	11.55	8.4	23.3		0.017	
	June' 2017								
02.06.2017	PACKER-2 (B.F.)	0.785	319	12.69	9.31	19.4	20.4	0.016	
09.06.2017	PACKER-2 (B.F.)	0.785	321	12.04	8.77	27.8		0.021	
16.06.2017	PACKER-2 (B.F.)	0.785	315	12.13	9.01	13.8		0.011	
23.06.2017	PACKER-2 (B.F.)	0.785	318	11.3	8.31	20.6		0.015	
	July' 2017								
06.07.2017	PACKER-2 (B.F.)	0.785	321	12.02	8.76	19.7	23.4	0.015	
13.07.2017	PACKER-2 (B.F.)	0.785	318	11.12	8.18	27.4		0.019	
20.07.2017	PACKER-2 (B.F.)	0.785	320	12.52	9.15	21.2		0.017	
27.07.2017	PACKER-2 (B.F.)	0.785	319	11.34	8.32	25.2		0.018	
	August' 2017								
02.08.2017	PACKER-2 (B.F.)	0.785	320	11.51	8.41	17.4	18.7	0.013	
09.08.2017	PACKER-2 (B.F.)	0.785	319	11.99	8.79	23.4		0.018	
23.08.2017	PACKER-2 (B.F.)	0.785	321	12.35	9	19.7		0.015	
30.08.2017	PACKER-2 (B.F.)	0.785	318	11.17	8.22	14.3		0.010	
	September' 2017								
05.09.2017	PACKER-2 (B.F.)	0.785	317	12.04	8.88	16.6	16.5	0.013	
12.09.2017	PACKER-2 (B.F.)	0.785	320	12.52	9.15	15.1		0.012	

19.09.2017	PACKER-2 (B.F.)	0.785	319	12.77	9.36	20.4		0.017	
26.09.2017	PACKER-2 (B.F.)	0.785	321	11.43	8.33	13.8		0.010	
	April' 2017								
05.04.2017	PACKER-3 (B.F.)	0.785	319	12.69	9.31	18.6	22.3	0.015	
12.04.2017	PACKER-3 (B.F.)	0.785	321	12.24	8.92	26.3		0.020	
19.04.2017	PACKER-3 (B.F.)	0.785	318	11.52	8.47	23.4		0.017	
26.04.2017	PACKER-3 (B.F.)	0.785	320	11.87	8.68	20.9		0.016	
	May' 2017								
05.05.2017	PACKER-3(B.F.)	0.785	323	13.39	9.7	28.8	23.7	0.024	
12.05.2017	PACKER-3(B.F.)	0.785	320	12.71	9.29	19.9		0.016	
23.05.2017	PACKER-3(B.F.)	0.785	321	12.04	8.8	24.7		0.019	
29.05.2017	PACKER-3(B.F.)	0.785	324	12.35	8.92	21.4		0.016	
	June' 2017								
02.06.2017	PACKER-3(B.F.)	0.785	321	12.88	9.39	21.9	25.4	0.018	
09.06.2017	PACKER-3(B.F.)	0.785	324	12.6	9.1	24		0.019	
16.06.2017	PACKER-3(B.F.)	0.785	322	11.43	8.3	29.3		0.021	
23.06.2017	PACKER-3(B.F.)	0.785	320	12.02	8.79	26.4		0.020	
	July' 2017								
06.07.2017	PACKER-3 (B.F.)	0.785	318	11.63	8.56	21.6	24.8	0.016	

13.07.2017	PACKER-3 (B.F.)	0.785	315	10.92	8.11	29.2		0.020	
20.07.2017	PACKER-3 (B.F.)	0.785	320	12.05	8.81	25.6		0.019	
27.07.2017	PACKER-3 (B.F.)	0.785	317	10.52	7.76	22.6		0.015	
	August' 2017								
02.08.2017	PACKER-3(B.F.)	0.785	317	10.95	8.08	25.2	21.8	0.018	
09.08.2017	PACKER-3(B.F.)	0.785	319	11.34	8.32	20.1		0.014	
23.08.2017	PACKER-3(B.F.)	0.785	321	11.88	8.66	18.4		0.014	
30.08.2017	PACKER-3(B.F.)	0.785	316	10.78	7.98	23.5		0.016	
	September' 2017								
05.09.2017	PACKER-3(B.F.)	0.785	320	11.56	8.45	19.2	23.2	0.014	
12.09.2017	PACKER-3(B.F.)	0.785	318	12.11	8.91	21.9		0.017	
19.09.2017	PACKER-3(B.F.)	0.785	323	10.96	7.94	27.8		0.019	
26.09.2017	PACKER-3(B.F.)	0.785	321	10.74	7.83	23.7		0.016	
	April' 2017								
05.04.2017	PACKER-4 (B.F.)	0.785	320	11.17	8.17	24.4	21.2	0.017	
12.04.2017	PACKER-4 (B.F.)	0.785	319	12.69	9.31	19.5		0.016	
19.04.2017	PACKER-4 (B.F.)	0.785	317	12.01	8.86	22.8		0.017	
26.04.2017	PACKER-4 (B.F.)	0.785	321	12.29	8.96	17.9		0.014	
	May' 2017								

05.05.2017	PACKER-4(B.F.)	0.785	323	11.97	8.67	23.6	22.6	0.018	
12.05.2017	PACKER-4(B.F.)	0.785	324	12.6	9.1	21.2		0.017	
20.05.2017	PACKER-4(B.F.)	0.785	320	12.62	9.23	27.3		0.022	
27.05.2017	PACKER-4(B.F.)	0.785	322	12.11	8.8	18.3		0.014	
	June' 2017								
02.06.2017	PACKER-4(B.F.)	0.785	320	12.42	9.08	26.4	26.7	0.021	
09.06.2017	PACKER-4(B.F.)	0.785	323	11.92	8.63	21.5		0.016	
16.06.2017	PACKER-4(B.F.)	0.785	319	12.1	8.87	29.9		0.023	
23.06.2017	PACKER-4(B.F.)	0.785	321	11.57	8.43	28.9		0.021	
	July' 2017								
06.07.2017	PACKER-4 (B.F.)	0.785	322	11.55	8.39	22.6	20.5	0.016	
13.07.2017	PACKER-4 (B.F.)	0.785	318	11.02	8.11	18.9		0.013	
20.07.2017	PACKER-4 (B.F.)	0.785	320	12.47	9.12	24.2		0.019	
27.07.2017	PACKER-4 (B.F.)	0.785	319	12.13	8.9	16.2		0.012	
	August' 2017								
02.08.2017	PACKER-4(B.F.)	0.785	320	11.51	8.41	14.0	17.7	0.010	
09.08.2017	PACKER-4(B.F.)	0.785	319	11.04	8.1	22.3		0.016	
23.08.2017	PACKER-4(B.F.)	0.785	321	12.49	9.1	18.1		0.014	
30.08.2017	PACKER-4(B.F.)	0.785	318	12.11	8.91	16.2		0.012	

	September' 2017								
05.09.2017	PACKER-4(B.F.)	0.785	318	11.82	8.7	12.0	15.8	0.009	
12.09.2017	PACKER-4(B.F.)	0.785	321	12.49	9.1	17.7		0.014	
19.09.2017	PACKER-4(B.F.)	0.785	320	11.56	8.45	20.1		0.015	
26.09.2017	PACKER-4(B.F.)	0.785	317	11.16	8.24	13.4		0.010	

J.K. Cement WORKS, MANGROL (RAJ)
AMBIENT AIR QUALITY AVERAGE RESULTS (SPM) COMMON FOR UNIT-1 & UNIT-2
(ALL VALUES IN MICROGRAMS / CUBIC METER)
April' 2017 - September' 2017

S.No. & Month	LOCATION / PERAMETER	NEAR TIME OFFICE	NEAR THERMAL POWER PLANT	NEAR RAW MATERIAL GATE	NEAR PACKING PLANT GATE	Remarks
April' 2017						
1	SPM	346.3	388.0	355.0	323.5	
2	SO2	12.9	16.4	13.5	10.4	
3	NOX	25.9	32.4	28.9	21.0	
4	CO	572.5	744.3	687.0	472.3	
May' 2017						
1	SPM	379.0	397.5	366.8	349.8	
2	SO2	15.4	16.8	14.2	11.5	
3	NOX	28.9	31.7	25.0	22.6	
4	CO	572.5	744.3	687.0	472.3	
June' 2017						
1	SPM	347.2	377.7	350.2	350.3	
2	SO2	14.2	16.8	14.9	13.8	

3	NOX	26.4	32.2	29.4	26.4	
4	CO	458.0	715.6	615.4	486.6	
July' 2017						
1	SPM	295.8	315.2	295.8	275.0	
2	SO2	8.4	9.7	7.4	6.5	
3	NOX	16.8	18.5	14.7	13.4	
4	CO	443.7	472.3	486.6	415.1	
August' 2017						
1	SPM	296.3	342.2	312.3	282.0	
2	SO2	8.7	12.0	10.2	7.0	
3	NOX	17.6	23.4	20.0	15.0	
4	CO	500.9	615.4	453	429.4	
September' 2017						
1	SPM	328.3	379.3	355.5	311.7	
2	SO2	13.0	15.9	12.0	10.1	
3	NOX	25.0	31.0	23.0	19.9	
4	CO	444	615.4	558.2	372.1	
Six monthly Average						

1	SPM	332.1	366.7	339.3	315.4	
2	SO2	12.1	14.6	12.0	9.9	
3	NOX	23.4	28.2	23.5	19.7	
4	CO	498.6	651.2	581.2	441.3	

Fugitive Emission Monitoring Report
April' 2017 - September' 2017

S.No.	Month/Year	SPM (µg/m3)			
		NEAR COAL YARD-1	NEAR LIMESTONE CRUSHING SITE-1	NEAR STACKER RECLAIMER- 1	NEAR GYPSUM YARD-1
1	Apr-17	1758.5	UM	UM	2121.5
2	May-17	1838.2	2378.5	2909.8	1451.5
3	Jun-17	1380.9	2041.0	2392.0	1383.1
4	Jul-17	1113.4	1794.1	1802.2	1212.1
5	Aug-17	1036.5	1743.7	1724.7	1302.1
6	Sep-17	1312.5	2017.9	2010.4	1586.1

J.K. Cement Works, Mangrol (Unit-2)
Fugitive Emission Monitoring Report
(April' 2017 -September ' 2017)

S.No.	Month/Year	SPM ($\mu\text{g}/\text{m}^3$)			
		NEAR COAL YARD-2	NEAR LIMESTONE CRUSHING SITE-2	NEAR STACKER RECLAIMER-2	NEAR GYPSUM YARD-2
1	Apr-17	1757.7	1892.4	1842.3	2214.2
2	May-17	1590.3	1776.1	1618.1	1871.6
3	Jun-17	1352.5	1683.9	1449.7	1722.2
4	Jul-17	1036.5	1349.0	1206.0	1189.0
5	Aug-17	989.6	1191.5	1110.0	1118.1
6	Sep-17	1474.1	1836.2	1411.8	1526.6

J.K. *Cement* WORKS, Mangrol (RAJ)
Treated Domestic Effluent Analysis Report

April' 2017 - September' 2017

S.No.	PARAMETER	Standards	April-17	May-17	June-17	July-17	August-17	September-17
1	pH	Between 5.5 to 9.0	7.72	7.78	7.3	7.44	7.19	7.57
2	Chlorides as Cl	Not to exceed 1000 mg/l	96.84	98.5	127.82	110.14	113.75	105.97
3	Total Suspended solids	Not to exceed 100 mg/l	20.9	19.8	8	12.6	8	8
4	Biological Oxygen Demand (3 days at 27 Degree C)	Not to exceed 30 mg/l	18.8	20	14.8	16.2	12.6	11.4
5	Chemical Oxygen Demand	Not to exceed 250 mg/l	94.6	98.8	66.4	92.8	76.2	68.6
6	Oil & Grease	Not to exceed 10 mg/l	9.2	7.5	4.8	6.4	3.9	3
7	Ammonical Nitrogen (as N)	Not to exceed 50 mg/l	1.2	1.36	0.9	1.14	<0.1	<0.1
8	Sulphide (as S)	Not to exceed 2.0 mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
9	Total Residual Chlorine	Not to exceed 1.0 mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1